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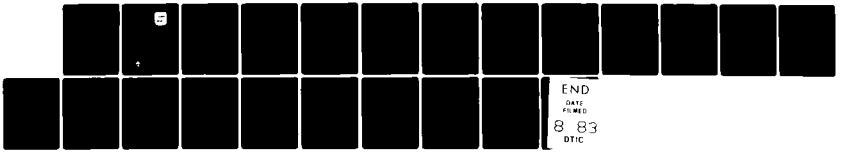

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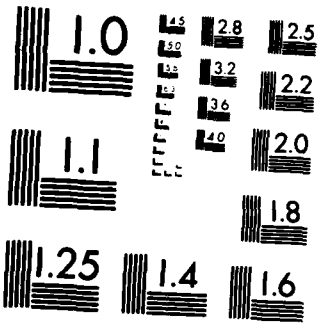

STUDENT ESSAY

FIGHTING POWER AND THE MAINTENANCE OF COMBAT STRENGTH: THE IMPERATIVE ALLIES OF TECHNOLOGY

BY

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25 MAY 1983

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This essay examines the combat multiplier effect which can be derived from fighting power and the maintenance of combat strength from a historical perspective, using as a vehicle data from the German Army's experience in World War II.

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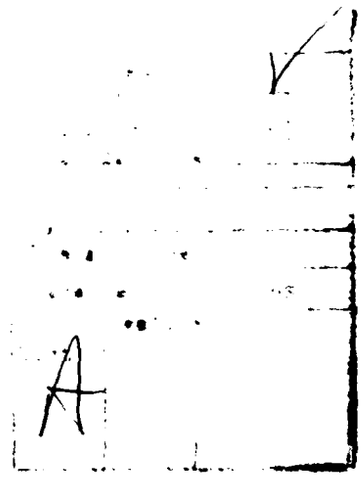
Fighting Power and the Maintenance of Combat Strength: The Imperative Allies of Technology

Individual Essay

by

Colonel Jesse H. Denton
Infantry



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ABSTRACT

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The publication of FM 100-5, Operations, in 1976 represented the end of an era in U.S. Army doctrine. To fight outnumbered and win became the philosophy behind the Army's new doctrine. The 1982 version of FM 100-5 incorporated the air-land battle concept into Army doctrine as a means of exploiting the technological superiority of new equipment as a means of striking deep into second echelon forces of the Warsaw Pact. Unfortunately the 1976 and 1982 versions of FM 100-5 omitted any reference to the human dimension of combat--the importance of the individual soldier, and the fighting power he must generate to insure our success. Likewise, the maintenance of combat strength is omitted from new Army doctrine. This essay examines the combat multiplier effect which can be derived from fighting power and the maintenance of combat strength from a historical perspective, using as a vehicle for this examination data from the Germany Army's experience in World War II. This essay explains why fighting power and the maintenance of combat strength are imperative allies of technology and why they are too important not to be included in future editions of FM 100-5.

The publication of Field Manual 100-5, Operations, in 1976, represented the end of an era in U.S. Army doctrine.

In addition to being one of the most controversial field manuals ever published by the U.S. Army, it also introduced a new prescription for combat success which emphasized that Army units must be prepared to fight outnumbered and win.

The 1976 manual focused particular attention on the advances in technology and its impact on future battlefields by portending an era of improved mobility, greater lethality of weapons at extended ranges, improved night-fighting capability and the emerging importance of electronic warfare developments, et. al. The era so correctly described in the 1976 manual is a reality for the present and for the foreseeable future. The "how-to-do-it" aspects of this new doctrine, however, were met with great resistance in the Army concerning its application on the battlefield. Fortunately, the blessing of time has allowed the Army to dissect, analyze and debate this new doctrine with the aid of both computers and extensive field testing. While the debates will no doubt long continue, Generals DuPuy and Starry prodded the Army, kicking and scratching, through the portals of time into a new era of tactical doctrine. Implicit in implementing the new doctrine was a pressing requirement to modernize the Army's obsolete equipment to meet the perceived threat. The current Army Chief of Staff, General Meyer, has commenced modernization on a massive scale.

In our quest for the most qualitatively superior weapons systems, however, the procurement cycle has become inordinately prolonged as a result of chasing the ever-illusive leading edge of technology. We have sought to develop qualitatively superior weapons systems having greatly improved cross-country mobility, command and control, lethality and range in order to

quickly concentrate combat power to offset the numerically superior systems possessed by our potential adversary, the Warsaw Pact.

At the expense of reopening the 1976 debate, we unfortunately paid little regard to the soldier in our new doctrine. The 1976 Manual and its 1982 offspring are both systems-oriented and only address the human dimension of combat indirectly.

While it is entirely appropriate that we continually modernize our Army, and to push technology to its limits, it is equally important to analyze what makes our soldiers tick today, tomorrow and ask ourselves some "what if" questions regarding our future and his and the Nation's future needs. From this endeavor it follows that we develop low cost/no cost combat force multipliers should the Army not receive the necessary funding for optional modernization, or, if approved in the amount desired, the fielding schedule becomes so protracted that it is made obsolete by new technology.

The period between 1945 and the present has seen the United States enjoy significant technological superiority over the Soviet Union and her allies. However, what if this gap should narrow, or even close? What if we have to fight and win before the new generation of weapons systems are fielded? What if we are forced to fight the Warsaw Pact forces in an era of technological parity or inferiority and win, in 1990, for example? What if our Nation, due to societal changes, loses its will to wage war against the stated communist goals of world domination? How do we generate the requisite combat power to fight outnumbered and win with parity of arms? These questions and others will be examined in this essay from an historical perspective.

General Edward C. Meyer, Chief of Staff, U.S. Army, recently observed that, ". . . we need to learn from the past, but we also need to better

institutionalize what we learn so that we do not forget it quite so quickly."[1]

Since World War II the Warsaw Pact--the Soviet Union, in particular--has increased significantly the quantity and quality of her airborne, airmobile and missile forces, while simultaneously enhancing her river crossing, chemical and electronic warfare capabilities. In a general sense, however, Warsaw Pact forces remain armor, mechanized infantry and artillery intensive, particularly in the latter case. Their basic "meat and potato" emphasis in combat power and tactics remains quite similar to that of late 1945. Their technology has improved, to be sure, but in a relative context their emphasis remains unchanged. Russia's fighting potential continues to grow and remains significant; however, as we learned from the German Army's experience, she is by no means omnipotent. The Warsaw Pact can and must be defeated conventionally, because the nuclear warfare alternative--even on a tactical level, is, in a Clausewitzian sense, a politically bankrupt option.

With this backdrop, let's now examine technological superiority along with some low cost/no cost alternatives with the view of providing some added options to our future force structure and modus operandi.

The following three areas of concern will be discussed in detail:

1. Technological superiority
2. Superior fighting power
3. Maintenance of combat strength

TECHNOLOGICAL SUPERIORITY

It is estimated (by non-attributal senior army officials) that the improved quality and experience of our soldiers, along with the technological improvements made in new equipment entering the Army's inventory during the past three years has increased our combat readiness by approximately

twenty-five percent. While this trend is certainly a welcomed change compared to the "hollow Army" characterized by the Army's Chief of Staff, General E. C. Meyer, at the beginning of this decade, combat readiness does not necessarily equate, in a direct sense, to our ability to fight. Although it is certainly more desirable than our former state of readiness, the present methodology for measuring combat readiness has recognized shortcomings in that it is primarily an objective measurement. We believe we have an able fighting force, but haunting questions and second thoughts remain, not the least of which is our lack of strategic mobility.

Throughout history armies which were the best equipped initially enjoyed a decided advantage over less fortunate adversaries. The French, at the outset of World War II, are an exception in recent history.

The M1 "Abrams" tank, the forty plus other major weapons systems, and the more than three hundred minor systems represent the largest force modernization effort by the U.S. Army since World War II. These new systems are specifically designed to give the United States armed forces technological superiority on land, sea and in the air. Whether or not these new systems will provide such assurance remains an illusive uncertainty in that the national power of nations, like the tide, rises and falls. Both Russia and American have been attributed as having periods of military superiority since World War II.

Whether or not these new systems foreshadow a new era in warfare--robotic weapons systems, or whether they are simply a "better mousetrap" remains to be seen. In either case, the "push-button" warfare theory, like the phoenix, seems to have arisen from its ashes. This is by no means a new phenomenon, however.

"The belief in push-button war is fundamentally a fallacy. But it is not a new fallacy," wrote the late Brigadier General S. L. A. Marshall, noted military historian. "It is simply an age-old fallacy in modern dress. . . ."[2] The material--weapons, equipment, supplies--change from war to war. But the characteristics of men do not change, [sic] only the application of combat principles change as dictated by changes of material.[3] It is universally recognized that as the means of war change, so must the training and knowledge of man be quickened to keep pace with the changes in technology. The new air-land battle doctrine is an effort to remedy this requirement. For the mechanisms of new warfare do not set their own efficiency. They are at the mercy of training methods which will stimulate the soldier to express his intelligence and spirit.[4] The dilemma with our current doctrine and reality, however, is that no nation on earth possesses such limitless resources that it can maintain itself in a state of perfect readiness to engage in war immediately and decisively and win total victory soon after the outbreak without destroying its own economy, pauperizing its own people, and promoting internal disorder.[5] The cost of new weapons systems in the quantity required may be prohibitive. This could become a significant factor should, as some economists predict during the 1985-86 time period, the world have an even more serious recession than the recent one.

Air-land battle doctrine and its application with the technology of new weapons systems brings with it leadership challenges never before encountered.

First, the nature of modern weapons systems have altered the nature of combat leadership, even battle itself, by their increased range and lethality. The frontage of the battlefield has been extended such that friend and foe alike are farther apart, more unseen. The intensity of battle is expected to be more fierce than ever experienced; the range and lethality of future

weapons, the casualties they are expected to produce, and the attendant battlefield isolation, will inherently increase the temptation to hide and shirk battle, and are also expected to increase battle stress casualties. Combat isolation and intensity of battle are natural contributors to battle stress casualties. Gone is one of the strongest incentives to stand and fight: the nearby presence of a comrade who is visible which has existed on the battlefield from the Battle of Agincourt, in 1415, to Vietnam. One can visualize a series of weapons systems enclaves on the future battlefield. In some respects the anominity and the cover, concealment, and safety of a weapons systems enclave can be alikened to the French cavalry's failure to muster an effective charge at Agincort. There was no reputation to be won fighting archers.[6]

Will such a battlefield environment, like the advent of tactical nuclear weapons did in the 1960's, again bring forth some force structure akin to the Battle Group or Pentomic Division? One could summarily reject such an idea as obsolete and of no value were it not for our "rediscovery" of the multiple launch rocket system and the gatling gun.

A second major leadership challenge, in my view, will be fire discipline. Although new weapons are much more accurate, their rate of fire is also much faster in most cases. Should the enemy decide to fight a prolonged battle of attrition, our meager ammunitions stocks would be soon depleted, and our woefully deficit logistical lift potential and lack of ready wartime industrial base negate our "fight outnumbered and win quickly" doctrine.

A final leadership challenge, it seems, will be the necessity to generate unity of action in order to mass the requisite combat power at critical times and places. Although our communications systems are much improved, the isolation of a leader from his subordinates [illegible] be [illegible]erious weakness.

Do the above suppositions require a reevaluation of our doctrine? Should we be condemned to fight a poor man's war can we do so and win?

While technologically superior equipment will significantly improve our combat power, new military technology often brings mixed blessings to we Americans in that we tend to mentally reject the human dimension of combat and to "systems engineer" new technology to a point where it becomes inanimate. This trend, although not a new one, has become particularly evident since World War II. A comparison between the importance accorded the individual in the 1941 Field Service Regulation (FM 100-5) and the present Manual illustrates this point.

The 1941 manual stated that "man is the fundamental instrument of war . . .,"[7] and that ". . . the worth of the individual is still decisive. . . ."[8] The modern version, on the other hand, gives one--by its ommission of the individual, his ability to think, to plan and to react; the impression that man is merely an "instrument" in the grand scheme of thir s, a cog in the wheel. (By analyzing the amount of space devoted to defensive forms of combat doctrine in the new Manual as opposed to the more decisive offensive forms of combat doctrine, one might conclude that we are fielding offensive weapons systems, designed for deep thrusts, with a defensive doctrinal mindset.)

Weapons systems themselves can become a panacea, leaving out the human element, a very dangerous trend if we are to fight outnumbered and win.

General Ezer Weizman, former Commander of the Israeli Air Force, cites an example whereby Israel became impalled by a similar "technological panacea" mindset during the Yom Kippur War:

> ". . . This negative mood among the ministers was characterized by a remark made by my friend Yisrael Galili, then--as now--minister without portfolio. After hearing a depressing report on an air force

attempt to attack the Egyptian missiles system, which resulted in the loss of a further Phantom and one of our best pilots, Galili got up and paced up and down the Cabinet room, an indication that he was tense. He halted beside me, his expression grim, 'Ezer, where's it all going to end? If we don't get that Shrike missile from the United States, what's going to happen?'
That question, and the doubt underlying it, the fear of what would happen if we didn't get some missile or other, hung over the Cabinet's deliberations like a heavy cloud, overshadowing our military thinking at that time. In the final account, this is the reason why the War of Attrition will be remembered as the first war that Israel did not win: a fact that cleared the way for the Egyptians to launch the Yom Kippur War. It was the first time in the annals of Israel and her armed forces that the inability to gain an undisputed victory was excused by technological limitations and the lack of some weapon or other. I don't hesitate to say that, if such had been the consideration guiding the senior political and military echelons in 1948, Israel's fate would have been sealed before the Arab armies fired a single shot and Israel would never have arisen.

In 1948 and 1967, and during all the difficult times up to 1970, we never budged from the concept, without which Israel's existence would have been inconceivable, that our safety would be ensured not by parity of armament, but by the quality of the Israeli soldier; that it wasn't technological superiority which made us stronger than our enemies, but our great spiritual pre-eminence; that it wasn't arsenals crammed with the weapons and missiles which maintained us in the Middle East, but resourcefulness and cunning and brains, following the precept, 'By ruses shall you make war'. All through the War of Attrition, there wasn't a day when we didn't talk of our moral preponderance, but we contented ourselves with talk; without being convinced of these truths, all this was mere lip-service. Of the great conviction that we could overcome the Arabs, even if we didn't have some weapon or missile--ground, air or naval--nothing was left but words whose meaning had vanished. Either we got the Shrike--or what? Indecision. Lack of initiative. Acquiescence. Thus, the War of Attrition was the first one in which we gave in to technological limitations."[9] (Emphasis added.)

While scientists and engineers play an important role in the affairs of Nation's, soldiers win war. We must retain in the philosophy of our doctrine

the great importance of the individual, least we fall into the same mental trap as did Israel. We may, in fact, already be in that trap and need to quickly "dig our way out." While our force modernization must continue, we must also incorporate some low cost/no cost options into our training through fighting power and the maintenance of combat strength discussed below.

FIGHTING POWER

"Within the limits set by its size, an army's worth as a military instrument equals the quality and quantity of its equipment multiplied by what will be termed its Fighting Power . . . Fighting power, in brief, is defined as the sum total of [those] mental qualities that make armies fight."[10]

The subject of why men fight has been the topic of countless conversations and essays. Unfortunately, more pure scientific research has been devoted to the mating habits and migratory routes of whooping cranes than to this equality important subject.

History cites many examples of superior fighting forces: the French during the Napoleonic era; the Romans in the era of Ceasar; the Wehrmacht during Hilter's reign; and since 1948, the Israelis, to cite only a few. That these armies remained unsurpassed in military excellence for only brief periods before they waned or disintegrated suggests that fighting power is something that can be attained rather than some inherent national quality of its people.

Professor von Crevald expressed it in the following manner:

> "Though military excellence is unconceivable without victory, victory is by no means the sole criterion of military excellence. A small army may be overwhelmed by a larger one. Confronted with impossible political and economic odds, a qualitatively superior force may go down to defeat through no fault of its own. Not the outcome alone, but intrinsic qualities. Also must therefore figure in an attempt to measure military (or any other) excellence: omit to do this and the very notion of quality becomes impossible to maintain."[11]

Few armies better institutionalized their leadership methodology, more effectively tailored their forces or derived greater fighting power in combat application than did the German Army in World War II. Their efficiency and effectiveness, though of a different era and circumstances, offers many valuable lessons for the future.

Fighting outnumbered and with less equipment, the German Wehrmacht defeated both the British Expeditionary Force and the French Army and seized France in six weeks. It took a crushingly superior allied force four months to drive it out again. Similarly, it drove to the gates of Moscow in five months, yet it took the later immeasurably stronger Russian Army two and one half years and millions of dead to eject its tenacious foe.

Depending on the particular front and the category of arms one cares to select, the German Army was outnumbered three, five--even seven to one. Yet it did not run, disintegrate, or "flag" its officers. It doggedly fought on.[12]

By 1945, it had suffered more than one million and one half in dead alone and countless prisoners on all fronts. Yet for all this its units, even though down to twenty percent of establishment, continued to exist and resist--an unrivalled achievement for any army.[13]

Although several European nations have a long martial tradition, the Germans have not only been the most persistently aggressive of European nations of modern times, but have proved to be also the most redoubtable of European soldiers.[14]

The secret of the German Army's success lay in their more effective use of human resources, its unit cohesion and its morale in combat. These qualities were an inherent part of the German soldier's training which were subtly instilled in him throughout his military training.

In seventy-eight (78) combat engagements, involving Allied combat divisions of all types and German divisions of all types, and in all forms of offensive and defensive combat, German divisions inflicted 64 percent more casualties per day on Allied Forces on the Western Front than they suffered.[15]

How did the German Army instill such qualities of fighting power in its soldiers? First, they recruited soldiers on a regional basis, trained them as a regional unit and never disbanded a unit, nor did they provide that unit with individual replacements. Direct partnerships existed between specific training units and combat units. There were frequent visits and contacts between the commanders of such units; each had a vested, personal interest in the training and subsequent performance of <u>their</u> soldiers. Replacements to units were provided on a unit replacement basis, i.e., platoons, companies and battalions. All training given soldiers (in what we could call BCT/AIR) was conducted by former members of the parent unit who were recovering from wounds or on a rotation from the front. These same trainers then deployed to the front when their trainees were graduated, as a unit and under the command of their former trainers. Unit integrity and cohesion were pervasive throughout a soldier's training fostering a deep feeling of comraderie. Wounded, sick and injured soldiers returning to combat were processed through a replacement battalion, organic to each division, that insured a returning soldier was returned to his former unit, down to company/battery level. Thus, unit members knew each other regionally--possibly locally--from conscription to death, hence, anything less than total professionalism and proper deportment in combat was unthinkable.

Finally, and possibly most important, regimental commanders exercised absolute power, including capital punishment, over their soldiers. This included all promotions authorized in the regimental structure. The regiment was "home," unless promoted away from it, or unless one were killed or permanently diabled.

Unlike the American system, the importance of the individual soldier and not a weapon system, was the focal point around which everything in the Germany Army hinged; personal friendship and a deep, personal feeling of comraderie were shared by all. Unlike the dehumanizing nature of our individual replacement system, a major cause of shirking in combat or battle stress by our soldiers, the Germany system operated on the premise, ". . . that when a soldier is unknown to the men who are around him he has relatively little reason to fear losing the one thing that he is likely to value more highly than life--his reputation as a man among other men."[16] A simple but key ingredient of what manifests fighting power in a unit is in a soldier's head and heart rather than the sophistification of the weapon in his hands.

MAINTENANCE OF COMBAT STRENGTH

Had ten thousand American and German soldiers, respectively, met on D-Day, the same number of dead and wounded been sustained by each, and each received no additional personnel, the American force would have never reached the Mosel River much less the Rhine. Moreover, the German force's strength would have been approximately twenty percent (20%) greater than the American force six months hence.

First, German soldiers--largely for the reasons cited in "fighting power," above--suffered very low battle stress, a rate of approximately three percent (3%), eighty-five percent (85%) of whom were returned to normal duty.

American combat division, on the other hand, suffered twenty-six percent (26%) battle stress casualties, June-December 1944, almost ten times the German figure.[17] During the war almost forty-two million American man-days were lost due to psychiatric illness; eight point nine percent (8.9%) of the entire American Army strength received psychiatric treatment; three hundred twenty thousand were discharged (the equivalent of 22, 15,000-man divisions) as unfit. At one point, indeed, more men were being discharged from the Army for psychiatric reasons than were being added by induction, prompting General George C. Marshall, Chief of Staff, to set up an investigation.[18] Only five percent of American psychiatric (battle stress) casualties suffered during the North African Campaign were returned to duty.

Battle casualties showed a similar trend favoring the Germans--98 days noneffective per casualty,[19] versus 117.8 days noneffective per American casualty.[20] The average American non-battle casualty hospitalization was 23.3 days,[21] 9.3 days for German non-battle casualties. Sixty-four percent (64%) of American wounded returned to duty, compared with 85 percent of German wounded.[22]

American battle stress casualties were of two basic types: green troops, usually replacements, who went to pieces within five days of arrival or so of seeing combat; the other, seasoned veterans who cracked after about four months of combat. Available evidence indicates the former cases were victims of the Replacement System and the faulty cohesion of American units;[23] whereas, stress casualties among veterans is believed to be a result of the poor American rotation policy. American soldiers were rotated out of the line based on a point system--not combat exposure, or the result of wounds, or the unit being rendered combat ineffective, none of which are logical. German

soldiers, on the other hand, were rotated based on combat exposure time and its intensity, a more logical method.

German awareness of and appreciation for the maintenance of combat strength is evident. Their stress casualties were treated immediately to the rear of front lines, rested and returned to duty normally within eight days. It is interesting to note that Israeli soldiers (who have suffered a reported battle stress casualty rate of 10 percent in Lebanon) are being treated by a "new" method of combat psychiatry, immediately behind the front lines.

It is apparent that we have much work to do if we are to fight outnumbered and win; and that we can learn much from the Germany Army's experiences in World War II.

In the final analysis, battle can but manifest action, occupy time and space, and grudgingly yield from the foregoing a state of victory to the most talented and tenacious participants. Battle, in essence, is a benign entity of no consequence and no reality without combatants to give it a symbolence of animation. Though we often speak of battle as if it were a living entity, we are in reality speaking about men and their fighting power. Only they can orchestrate and dramatize the unities of time, space and action to give battle a discernible meaning.

As soldiers we study in finite detail the use of time, space and action; unfortunately, all too little of our study is spent in an effort to better understand how to motivate, train and lead our soldiers so as to orchestrate their direction and unity with the highest degree of efficiency. The human dimension of war is victim of our benign neglect which we rediscover in every war.

Technology and weapons superiority are vital to our future success on the battlefield, but technology can only be exploited by dedicated, professional soldiers who manifest an inner spirit which generates fighting power. This spirit, and the combat multiplier effect created by the individual soldier, is much too important to be omitted from future editions of FM 100-5.

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